

REMARKS

Claims 2-11, 13-22 and 28-42 are pending in the above-captioned patent application after this amendment. Claims 1-27 have been rejected. Claims 2, 4-6, 11, 13 and 16-19 have been amended to change dependency of these claims, and claims 28-42 have been added, all for the purpose of expediting the patent application process in a manner consistent with the goals of the Patent Office pursuant to 65 Fed. Reg. 54603 (September 8, 2000), even though the Applicant believes that the previously pending claims were allowable.

Support for the amendments to the claims and for the new claims can be found throughout the originally filed application, including the originally filed claims, the drawings and the specification. More specifically, support for the amendments to claims 2, 4-6, 11, 13 and 16-19 and for new claims 28-42 can be found at least in Figures 1-4, in claims 1-27, and in the specification at page 3, line 17 through page 7, line 17.

No new matter is believed to have been added by this amendment. Consideration of the pending application is respectfully requested.

Interview Summary

On January 26, 2006, the undersigned attorney for the Applicant conducted a telephonic interview with the Examiner, Isaac Woo. Prior to the interview, a proposed amendment and response was forwarded to the Examiner for his review. During the interview, the cited references were discussed, and language of the proposed independent claims was discussed in view of the teachings of the cited references. Although no agreement was reached and the Examiner indicated that he needed to review the proposed amendment and response more closely in view of the references, he did not state any position contrary to allowance of the claims. The undersigned attorney and the Applicant wish to thank the Examiner for his time and assistance during the interview.

Rejections Under 35 U.S.C. § 101

Claims 1-11, 23-25 and 27 are rejected under 35 U.S.C. § 101 because the Patent Office contends that the claimed invention is directed to non-statutory subject matter.

Although the Applicant disagrees with this contention, claims 1, 23-25 and 27 have been canceled without prejudice by this amendment. Thus, the rejection of these claims under 35 U.S.C. § 101 is believed to be moot. Further, claims 2-11 no longer depend from claim 1. Therefore, the rejection of these claims is also believed to be moot.

Rejections Under 35 U.S.C. § 112

Claims 23 and 25-27 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Although the Applicant disagrees with this contention, claims 23-25 and 27 have been canceled without prejudice by this amendment. Thus, the rejection of these claims under 35 U.S.C. § 112 is believed to be moot.

Rejections Under 35 U.S.C. § 102

Claims 12-24 and 26-27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nakano et al. (US 5,956,733). As provided above, the Applicant has canceled claims 12, 23, 24, 26 and 27 without prejudice. Further, claims 13-22 no longer depend from claim 12. Therefore, the rejection of claims 12-24 and 26-27 is believed to be moot.

Rejections Under 35 U.S.C. § 103

Claims 1-11 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano et al. in view of Crighton (US 6,330,570). As provided above, the Applicant has canceled claims 1 and 25 without prejudice. Claims 2-10 have been amended so that they no longer depend from claim 1. Thus, the rejection of claims 1-11 and 25 is believed to be moot.

New Claims

Claims 28-42 have been added by this amendment. Claims 28-42 are of a slightly different scope than the previously pending claims. However, in view of the cited references, taken individually or in combination, claims 28-42 are believed to be allowable.

Nakano et al. is directed toward a network archiver system and storage medium storing program to construct a network archiver system. The system includes a host 24

and a plurality of clients 26-1 to 26-3. Each client (for example, 26-1) includes its own archiver 34-1 to 34-3 which receives data from the host 24 or the client 26-1 that can be stored as either compressed or non-compressed data. Nakano et al. teaches that the data in the archiver 34-1 can be either de-compressed by a reconstructing module 22 (if already compressed) or compressed by a compressing module 21 (if not yet compressed) of the client 26-1, or of the host 24. (Fig. 4). However, Nakano et al. does not teach or suggest that the act of compressing or de-compressing occurs at a time when data is not being backed up to the client 26-1 or the archiver 34-1.

Stated another way, Nakano et al. does not address that the retrieval and subsequent compression of data, for instance, occurs at a time that is independent of backup of data. For example, the system of Nakano et al. can be backing up one block of data from the client 26-1 or archiver 34-1 and retrieving, compressing and/or restoring another block of data from the client 26-1 or archiver 34-1 simultaneously. The timing of these events is not addressed by Nakano et al. Moreover, the Patent Office admits that Nakano et al. does not disclose "defining a duty cycle for the downloading of data to a backup storage device, the duty cycle having a backup window period and an idle period."

The Patent Office states that Crighton discloses "schedule backup job allows the backup operator to specify times and dates for the proposed backup job." Further, the Patent Office states that "the GUI displays a further window, which allows the backup operator to specify at what time of day he would like the pre-backup check to operate. ... This discloses schedule backup job GUI for backup schedule cycle." The Patent Office concludes that "it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify Nakano by incorporating defining a duty cycle for the downloading of data to a backup storage device, the duty cycle having a backup window period and an idle period with the system of Crighton."

The Applicant respectfully disagrees with this rationale because the Applicant submits that there is no motivation to use the method taught by Crighton in Nakano et al's device. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the

applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991; Emphasis added). In the present case, neither is found.

Even if the combination of references taught every element of the claimed invention (which it does not), without a motivation to combine, a rejection based on a prima facie case of obviousness has been held improper. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Further, the "mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990; emphasis original and added).

Importantly, Crighton does not teach or suggest that the backup device has an idle period during which any other processes occur, or even that such an idle period might serve some important purpose or function. Crighton is blind to this entire concept, as is Nakano et al. Thus, there is nothing in either reference that teaches the importance of the timing of both a backup period (when data is backed up) and an idle period (when retrieval, compression and/or re-storage can occur without slowing or otherwise hindering the backup of data), and that these periods should be mutually exclusive. Thus, there is no motivation to combine these references in the manner suggested by the Patent Office.

Additionally, the combination of cited references does not teach or suggest the features and/or steps in new claims 28-42. For instance, even if Crighton defined a duty cycle for when a backup is to occur, it does not define that such a duty cycle defines what occurs when the backup is not occurring. Thus, combining the system of Nakano et al. with the system of Crighton would yield an archiver system that specifies a time window that backup is to occur, but does not specify when other processes are to occur relative to the backup time window.

Further, Crighton does not teach or suggest that no other processes (i.e. retrieval, compression and/or re-storage of data) should occur during the backup period. In addition, Crighton does not specify the types of activities that should occur while the backup is not occurring. Nor does Crighton specify that certain other data processing activities are to commence upon the inactivity of various backup processes. For

example, Crighton does not teach or suggest that such an idle period commences following a predetermined time of inactivity of the backup device. In other words, there is no suggestion or teaching in Crighton indicating, for example, that after 20 minutes of inactivity of the backup device, the idle period begins during which compression of data on the backup device occurs.

In other words, although Crighton is directed toward a data backup system that suggests an operator can select a backup period (and a pre-backup period), Crighton does not suggest that this backup time is selected so that any other processes can be performed during an idle period. In fact, Crighton teaches that the selection of the backup period to occur "later in the day" is based on "lowering the risk that a new problem will be encountered."

More specifically, from the perspective of the backup device, Crighton only addresses determining a time for backup of data. Crighton is not concerned with what occurs when data is not being backed up to the backup device. For example, Crighton does not teach or suggest that while data is not being backed up to the backup device, that compression of the backed up data should occur, or any other process concerning the backed up data.

In contrast to the cited references, claim 28 is directed toward a storage system that requires "a primary storage location including an input/output port; a backup storage device; and a controller that transmits data between the primary storage location and the backup storage device according to a duty cycle having a predetermined backup window period when uncompressed data from the primary storage location is copied to the backup storage device, and an idle period when uncompressed data from the primary storage location is not being copied in uncompressed form to the backup storage device; wherein during the idle period the controller retrieves the uncompressed data stored on the backup storage device, compresses the retrieved data, and then re-stores the compressed data on the backup storage device." These features are not taught or suggested by the cited references. Thus, claim 28 is believed to be allowable. Because claims 29-30 depend from claim 28, they are also believed to be allowable.

New claim 31 requires “a primary storage location including an input/output port; a backup storage device; and a controller that copies uncompressed data from the primary storage location to the backup storage device during a predetermined backup period, and retrieves the uncompressed data from the backup storage device, compresses the retrieved data, and then re-stores the compressed data on the backup storage device during an idle period that begins following a predetermined time period of inactivity through the input/output port.” These features are not taught or suggested by the cited references. Thus, claim 31 is believed to be allowable. Because claims 13-22 depend directly or indirectly from claim 31, they are also believed to be allowable.

New claim 32 is directed toward a computer-implemented method that requires the steps of “copying uncompressed data during a predetermined backup window period from the primary storage location to the backup storage device; compressing the data with a controller during an idle period defined by when uncompressed data is not being copied from the primary storage location to the backup storage device; and re-storing the compressed data onto the backup storage device during the idle period.” These steps are not taught or suggested by the cited references. Thus, claim 32 is believed to be allowable. Because claims 2-11 and 33-35 depend directly or indirectly from claim 32, they are also believed to be allowable.

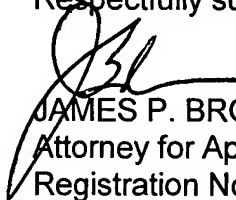
New claim 36 is directed toward a computer-implemented method that requires the steps of “copying uncompressed data from the primary storage location through the input/output port to the backup storage device; compressing the data copied to the backup storage device with a controller during an idle period that begins following a predetermined time period of inactivity through the input/output port; and re-storing the compressed data onto the backup storage device with the controller during the idle period.” These steps are not taught or suggested by the cited references. Thus, claim 36 is believed to be allowable. Because claims 37-42 depend directly or indirectly from claim 36, they are also believed to be allowable.

Conclusion

In conclusion, the Applicant respectfully asserts that claims 2-11, 13-22 and 28-42 are allowable for the reasons set forth above, and that the application is now in a condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 858-487-4077 for any reason that would advance the instant application to issue.

Dated this 26th day of January, 2006.

Respectfully submitted,


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